

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A machine for conveying a carton including a lid having at least one flap along a path in a first, substantially horizontal plane, comprising:

an overhead conveyor including at least one first lug selectively movable to a depending position for engaging and conveying the carton in a first direction along the path in the first plane;

a takeaway conveyor conveying at least one second lug selectively movable to an upstanding position for engaging and conveying the carton in a second direction along the path in the first plane, said second direction being generally perpendicular to the first direction; and

means for folding the at least one flap while the carton is conveyed along the path by the takeaway conveyor.

2. (Previously Presented) The machine according to claim 1, wherein the first lug is pivotally mounted to a conveyor chain for moving between a retracted position overlying the conveying path and the depending position.

3. (Previously Presented) The machine according to claim 1, wherein the takeaway conveyor includes a pair of generally parallel conveyor chains, each including at least one second lug, wherein each at least one second lug is pivotally mounted to the corresponding conveyor chain.

4. (Original) The machine according to claim 3, wherein each second lug is a pop-up lug movable between a retracted position below the conveying path and an upstanding position.

5. (Previously Presented) The machine according to claim 1, further including a rotatable wheel having at least one radially extending projection for at least partially closing the at least one flap before or during the engagement of the carton by the depending lug of the overhead conveyor.

6. (Previously Presented) The machine according to claim 1, wherein the means for folding the at least one flap includes a first stationary plow and at least one roller wheel for completing the folding in association with the plow.

7.-8. (Cancelled)

9. (Original) The machine according to claim 1, further including means for applying or activating an adhesive for sealing the at least one flap.

10. (Withdrawn) A machine for conveying a carton and at least partially folding a flap associated with a trailing end of the carton, comprising:

 a rotatable wheel having at least one radially extending projection for engaging and at least partially folding the flap;

 an overhead conveyor including at least one lug selectively movable to a depending position for engaging the trailing end of the carton once the flap is at least partially folded by the projection and conveying the carton in a conveying direction,

 a takeaway conveyor adjacent to the overhead conveyor conveying at least one second lug selectively movable to a position for engaging and conveying the carton in a second direction along the path, said second direction being generally perpendicular to the first direction; and

 means for folding the at least one flap while the carton is conveyed along the

path by the takeaway conveyor;

whereby the partial folding by the wheel helps to prevent the flap from being damaged by the depending lug.

11. (Withdrawn) The machine according to claim 10, wherein the overhead conveyor includes a pair of parallel conveyor chains, each carrying a plurality of lugs independently and selectively movable to the depending position.

12. (Withdrawn) The machine according to claim 11, wherein the plurality of lugs associated with each chain overlap with each other in the conveying direction.

13. (Withdrawn) The machine according to claim 10, wherein the rotatable wheel includes a plurality of radially-extending projections.

14. (Withdrawn) The machine according to claim 10, further including a sensor for sensing the location of the carton and generating a signal used to actuate the wheel to rotate and move the projection into engagement with the flap.

15. (Withdrawn) The machine according to claim 10, further including a support surface along which the carton is conveyed by the overhead conveyor.

16.-18. (Cancelled)

19. (Withdrawn) The machine according to claim 10, further including an infeed conveyor for feeding randomly received cartons to the overhead conveyor at a substantially constant speed.

20.-95. (Cancelled)

96.-105. (Cancelled)

106. (Previously Presented) The machine according to claim 1, wherein a portion of the overhead conveyor overlies a portion of the takeaway conveyor.

107. (New Claim) An apparatus for conveying a carton including a lid having at least one flap, comprising:

a conveyor assembly creating a conveying path having an L-shape in plan view, said conveyor assembly comprising an overhead conveyor overlying a first leg of the L-shaped conveying path and including at least one first lug mounted to a first endless chain for selectively pivoting relative to the first endless chain from a retracted position to a depending position for engaging and conveying the carton along the first leg of the L-shaped path, and a takeaway conveyor conveying at least one second lug mounted to a second endless chain for selectively pivoting relative to the second endless chain from a retracted position to an upstanding position for engaging and conveying the carton in a second leg of the path generally perpendicular to the first leg of the L-shaped path; and

a folder for folding the at least one flap while the carton is conveyed.

108. (New Claim) The apparatus of claim 107, wherein the overhead conveyor at least partially overlies the second leg of the L-shaped conveying path.

109. (New Claim) An apparatus for conveying a carton including a lid having at least one flap, comprising:

means for providing a conveying path having an L-shape in plan view;

means for conveying the carton along a first leg of the L-shaped path;
means for conveying the carton along a second leg of the L-shaped path, said
means for conveying along the first leg of the L-shaped path at least partially overlying the
second leg of the L-shaped path; and
means for folding the at least one flap while the carton is conveyed.

110. (New Claim) The apparatus of claim 109, wherein the means for creating a conveying path having an L-shape in plan view comprises a stable support surface.

111. (New Claim) The apparatus of claim 109, wherein the means for conveying the carton along the first leg of the L-shaped path comprises an overhead conveyor.

112. (New Claim) The apparatus of claim 109, wherein the means for conveying the carton along the second leg of the L-shaped path comprises a takeaway conveyor.